

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A power line carrier system comprising:

a power branch device including

a power plug being removably connected to an in-house external power line,

a plurality of power outlets, and

a built-in power line for connecting the power plug and the power outlets; and

at least one electric device configured to be plugged into one of the power outlets, and

perform a power line communication in a first signal mode and a second signal mode, with
another electric device, the first signal mode being for a power line communication between
electric devices connected to the built-in power line, and the second signal mode being for a
power line communication between an electric device connected to the built-in power line and an
electric device not connected to the built-in power line via the in-house external power line,

wherein the power branch device controls the power line communication to pass a power
line carrier signal in the first signal mode only in the built-in power line, and allow a power line
carrier signal in the second signal mode to pass in the in-house external power line.

2. (Previously Presented) A power line carrier system according to claim 1, wherein the
power branch device supplies power obtained via the power plug from the in-house external
power line to the at least one electric device plugged into the one of the power outlets.

3. (Currently amended) A power line carrier system according to claim 1, wherein the power branch device further includes a filter configured to reject a frequency component corresponding to the power line carrier signal in the first signal mode from a signal from the built-in power line to the in-house external power line.

4. (Previously Presented) A power line carrier system according to claim 1, wherein the power branch device further includes a route controller configured to transmit the power line carrier signal only to an electric device of destination of the signal.

5. (Previously Presented) A power line carrier system according to claim 1, wherein the power branch device includes a signal converter configured to convert a signal mode of a power line carrier signal to the second signal mode.

6. (Previously Presented) A power line carrier system according to claim 5, wherein the signal converter converts a frequency of the power line carrier signal in the first signal mode to a frequency of the power line signal in the second signal mode.

7. (Previously Presented) A power line carrier system according to claim 5, wherein the signal converter converts a power level of the power line carrier signal in the first signal mode to a power level of the power line signal in the second signal mode.

8. (Previously Presented) A power line carrier system according to claim 1, wherein the first signal mode is compliant with the ECHONET standard.

9. (Previously Presented) A power line carrier system according to claim 1, further comprising a blocking filter configured to reject the power line carrier signal in the second signal mode, said blocking filter being placed between the inside and outside of a house.

10. (Original) A power line carrier system according to claim 1, wherein the electric device has a power code with a shield.

11. (Previously Presented) An electric device of a power line carrier system according to claim 1, wherein the at least one electric device selects the first signal mode or the second signal mode according to the another electric device of destination of the power line carrier signal, said another electric device being plugged into one of the other power outlets of the power branch device.

12. (Previously Presented) An electric device according to claim 11, wherein the at least one electric device sends an inquiry to said another electric device in the second signal mode, and selects the first signal mode or the second signal mode according to the inquiry result.

13. (Previously Presented) An electric device according to claim 11, wherein the at least one electric device selects the first signal mode or the second signal mode according to a communication route toward said another electric device.

14. (Previously Presented) An electric device according to claim 11, wherein the at least one electric device selects the first signal mode or the second signal mode according to whether to be connected to the same power branch device as said another electric device.

15. (Previously Presented) An electric device according to claim 11, wherein the at least one electric device transmits a test signal to said another electric device, and selects the first signal mode or the second signal mode according to communication conditions obtained by transmitting the test signal.

16. (Previously Presented) An electric device according to claim 15, wherein the at least one electric device selects the first signal mode or the second signal mode according to an error rate of the test signal.

17. (Previously Presented) An electric device according to claim 15, wherein the at least one electric device selects the first signal mode or the second signal mode according to an attenuation rate of the test signal.

18. (Currently Amended) A power branch apparatus comprising:
a power plug being removably connected to an in-house external power line;
a plurality of power outlets; and
a built-in power line for connecting the power plug and the power outlets, each of the power outlets configured to be connected to an electric device configured to perform a power line communication in a first signal mode and a second signal mode, with another electric

device, the first signal mode being for a power line communication between electric devices connected to the built-in power line, and the second signal mode being for a power line communication between an electric device connected to the built-in power line and an electric device not connected to the built-in power line via the in-house external power line,

wherein the power branch device controls the power line communication to pass a power line carrier signal in the first signal mode only in the built-in power line, and allow a power line carrier signal in the second signal mode to pass in the in-house external power line.

19. (Currently Amended) A method for performing a power line communication in a power branch device including a power plug being removably connected to an in-house external power line, a plurality of power outlets, and a built-in power line for connecting the power plug and the power outlets, wherein each of the power outlets is configured to be connected to an electric device configured to perform the power line communication in a first signal mode and a second signal mode, with another electric device, the first signal mode being for a power line communication between electric devices connected to the built-in power line, the second signal mode being for a power line communication between an electric device connected to the built-in power line and an electric device not connected to the built-in power line via the in-house external power line, and the power branch device controls the power line communication to pass a power line carrier signal in the first signal mode only in the built-in power line, and allow a power line carrier signal in the second signal mode to pass in the in-house external power line, said method comprising the steps of:

deciding to adopt either one of the first signal mode and the second signal mode according to an electric device of destination; and

10/629,803

performing the power line communication with the electric device of destination in the decided mode.